



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D350-636-015
Job Sheet 167302-A



Part No: D350-636-015

Job Qty: 1 ea

Part Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/27/17

Job Tracking No:

Due Date: 11/24/17

Created By: Mario Poulin

Type: Stock

Description:

Customer: Air Methods Corporation (CAMET01)

7301 South Peoria Street Englewood, CO, 80112 USA ph:(303) 792-7400

Ship Via:

PMA
E

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		11/23/17	0.00	0.00	Start Up Skidtubes		
110	Skidtubes	1 pcs		11/23/17	0.00	5.25	Skidtubes		BE BAS
120	QC	1 pcs		11/23/17	0.00	0.00	QC10		38 DAS
130	QC	1 pcs		11/23/17	0.00	0.00	QC5		9-85 38
140	HandFinish	1 pcs		11/23/17	0.00	0.99	HandFinish1		2017-11-27 JOK
150	QC	1 pcs		11/23/17	0.00	0.00	QC7		BE
160	Skidtubes	1 pcs		11/23/17	0.00	5.25	Skidtubes		BE / m66
170	QC	1 pcs		11/23/17	0.00	0.00	QC10		18-01-11
180	QC	1 pcs		11/23/17	0.00	0.00	QC5		24 18-1-11
190	HandFinish	1 pcs		11/23/17	0.00	0.99	HandFinish2		BE 18-01-11
200	SprayPaint	1 pcs		11/23/17	0.00	0.67	Spray Paint		DI 18-01-12
210	QC	1 pcs		11/23/17	0.00	0.00	QC14		BE 18-01-15
230	HandFinish	1 pcs		11/24/17	0.00	0.99	HandFinish14		BE 18-01-15
240	QC	1 pcs		11/24/17	0.00	0.00	QC5		24 18-1-16
250	Packaging	1 pcs		11/24/17	0.00	0.00	Packaging1		SM 18-1-17
260	QC	1 pcs		11/24/17	0.00	0.00	QC4		Smf
265	DC	1 pcs		11/24/17	0.00	0.00	DC		AT
270	Packaging	1 pcs		11/24/17	0.00	0.00	Packaging3		Smf
280	QC21-FG	1 Ea		11/24/17	0.00	0.00	QC21		JAN 17 2018

fg072

Part Op 110 - 1- Pick D2600-3 Bent 2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg
Descriptions: D4168 Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B) 4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting, section H-H. Open to 0.500" using hole saw. VERIFY AND RECORD FWD BEND ANGLE. 5- Drill tow ring hole using DT9616 detail "A" 6- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole. 7- Open up holes of Detail A to 0.297" (total of 2 holes per side) and .201" (total of 1 hole per side) 8- Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left from bending as per QSI 004 9- Grind welds flush as per Dwg D4168
160 - 1-Open up holes using hole saw of Detail C and ground handling section AL-AL to 0.625" (total of 8 holes per side) as per dwg D4168. 3- Open float hole to 0.500" using uni-bit (4 per side) section AJ-AJ Open wearplate holes to size as per dwg (4 holes per sides) , section CG-CG 4-Chamfer holes of Detail B, C, ground handling section AL-AL and float holes section AJ-AJ per dwg D4168 (welding instructions on sheet 8) 7-Bond web D2739 in place as per QSI 015, let cure 12hrs. A/R exp. date: 12/1/17 ***ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)*** 8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1 & QSI004 10-Grind welds flush as per Dwg D4168 11- Spot face ground handling holes section (total of 4 places per side) as per dwg D4168, section AL-AL 12- C-bore section CG-CG. ADJUST TOOLING AS REQUIRED. VERF BY: 13- Deburr holes, ensure tube is free of all scratches before sending to paint. ***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING HOLE IN

BE P/B MB 7133

BE MB 38654
EXP 2018-01-11



S014181



**Skidtube LH, Run – on Landing Wearplates, DART(Apical)
Cylind./Aerazur Float Comp.**

PART NO: D350 – 636 – 015

Revision:

Operation: Start up Operation

Change No:

Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA

TEL.: 1 613 632 – 5200

Email: sales@dartaero.com

www.dartaerospace.com

Mfg Date: 11/27/17

Job No: 167302 – A

TUBE *****REF TO W/O BATCH:*****

180- ***VERIFY C'BOARD IS GOOD***

190 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.

200 - 1- PRIME AS PER DWG AND QSI 005 4.2.1.3.3 *Batch: 138408 Pair in packing Batch: 138714*

210 - Inspect for foreign object per QSI 024

230 - 1- Install inserts as per Dwg D4168 3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D4168 5-Coat all exposed fasteners with "LPS Procyon" batch: *M133690*

250 - If making a D350-636-215 pick kit will only requires: 1 X AN3C37A 1 X AN3C34A 1 X AN3C42A 2 X D3493-1

260 - *****ensure antiseize is on AN8C21A bolts*****

265 - record fwd angle: *89.0* Photocopy blue file and type labels per PPP D350-636-015 CHG 005

270 - Identify and pack for shipping as per PPPD350-636-015 Location :FG071

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D2600-3-BENT-LH	1	2	0	0
	D2744 <i>161684</i>	1	0	0	0
160-Skidtubes	D2739 <i>3165489</i>	1	15	0	0
	D2743 <i>3180400</i>	8	145	0	0
	D3490-1 <i>3160394</i>	4	33	0	0
	D3490-3 <i>3165398</i>	4	20	0	0
230-HandFinish	ALS4-1032-225 <i>FM135998-2</i>	4	897	0	0
	AN3C34A <i>FM134676-1x1</i>	1	19	0	0
	AN3C36A <i>FM132381</i>	4	586	0	0
	AN3C6A <i>FM137861-1</i>	4	88	0	0
	AN6C44A <i>FM137055-1</i>	4	251	0	0
	AN8C35A <i>FM137203</i>	1	99	0	0
	D2745 <i>5000392</i>	8	92	0	0
	D3488-041 <i>F165344</i>	1	10	0	0
	D3492-1 <i>F165386</i>	8	59	0	0
	D3492-3 <i>F163469</i>	8	101	0	0
	D3631-1 <i>5008168</i>	8	4	0	0
	D3873-1 <i>F164363</i>	7	171	0	0
	D4154-041 <i>F161876</i>	1	7	0	0
	D4170-1	4	22	0	0
	D4171-1 <i>F153784</i>	1	13	0	0
	MS21043-3 <i>FM136182-40</i>	5	829	0	0
	MS21043-6 <i>FM138414-39</i>	4	66	0	0
	MS21083C8 <i>FM138238-1</i>	1	7	0	0
	NAS1149C0332R <i>5027570</i>	4	4,758	0	0
	NAS1149C0363R <i>FM133077</i>	9	221	0	0
	NAS1149C0832R <i>FM135536-01</i>	1	118	0	0
	NAS1515H3L <i>FM137361-25</i>	4	222	0	0
	NAS1611-010 <i>FM138441-2</i>	8	123	0	0
	NAS1611-013 <i>FM138441-122</i>	8	117	0	0
250-Packaging	- AN3C37A <i>5032922</i>	1	68	0	0
	- AN3C42A <i>5032920</i>	1	60	0	0
	- AN8C21A <i>5032919</i>	2	239	0	0
	- D2741 <i>5032918</i>	1	70	0	0
	- D3493-1 <i>5032916</i>	2	42	0	0
	- MS21083C8 <i>5032913</i>	2	7	0	0
	- NAS1149D0863J <i>5032912</i>	2	209	0	0

Part Specifications

Specifications could not be found.

Plex 10/27/17 2:37 PM dart.poulin.mario

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C8A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149CO363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149CO332R)
1	1	1	1	AN960CB16L	WASHER (OR NAS1149CO832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
OPTIONAL: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- WELD PER DART QSI 004
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

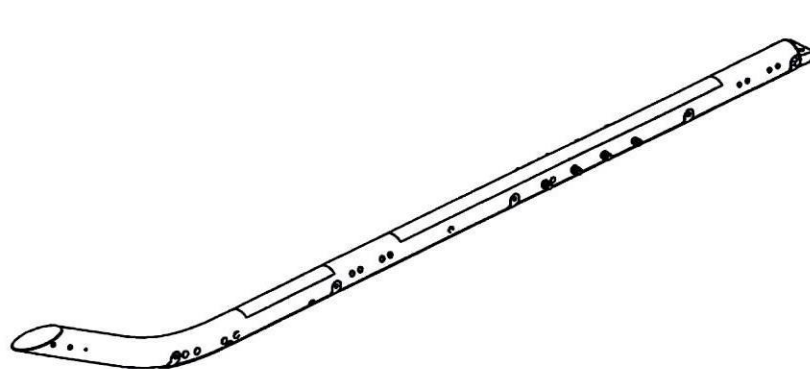
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 167302A

OCT 27 2017

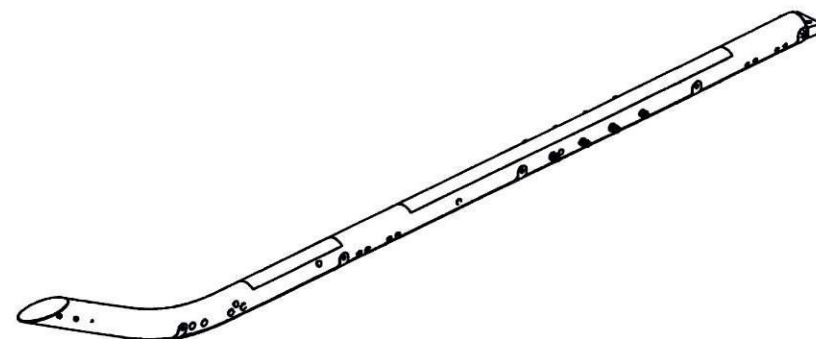
RELEASED
2013-08-13
MD

B	ADD VIEW TO CONTROL FWD BEND ORIENTATION (ZN D-1-4-5-6-7); UPDATED FINISH OPTIONS. REASON: PARTS-276 AND NCR15-2757	MB	13.07.11
A	NEW ISSUE	SC	10.08.09
REV.	DESCRIPTION	BY	DATE
DESIGN	SE		
DRAWN	SE		
CHECKED	SE		
MFG. APPR.	SE		
APPROVED	SE		
DE APPR.	SE		
DATE	13.07.11		

DART AEROSPACE USA, INC.	
KENT, WA	
DRAWING NO.	REV. B
D4168	SHEET 1 OF 11
TITLE	SCALE
350 SKIDTUBE ASSEMBLY	NTS
COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.	
THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. NO REPRODUCTION OR DISSEMINATION OF ANY PART OF IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



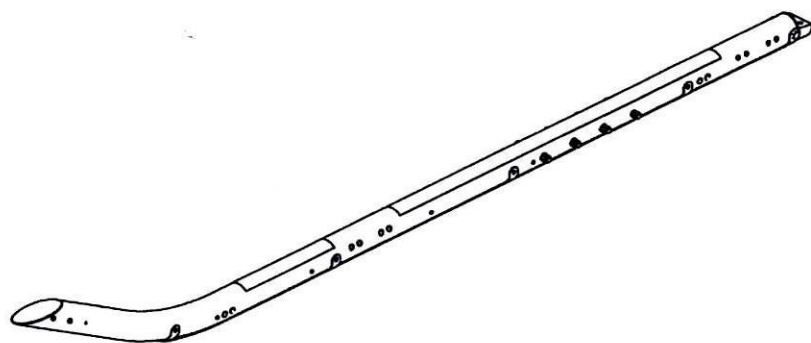
D4168-041 350 SKIDTUBE ASSEMBLY, LH



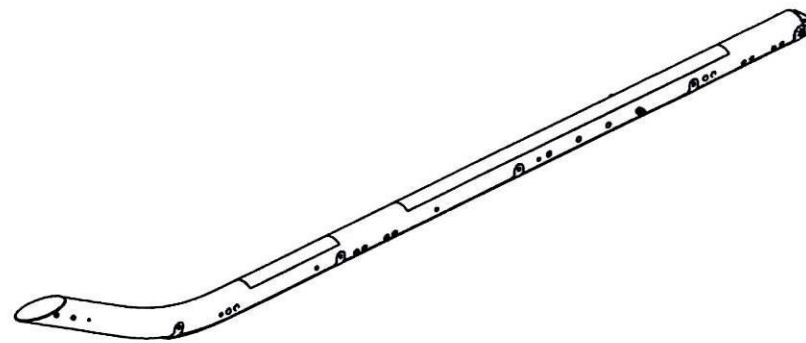
D4168-042 350 SKIDTUBE ASSEMBLY, RH

RELEASE
2013-08-13
AW

DESIGN DRAWN <i>SC</i> CHECKED <i>SC</i> MFG. APPR. <i>SC</i> APPROVED <i>SC</i> DE APPR. <i>SC</i> DATE 13.07.11		DART AEROSPACE USA, INC. KENT, WA DRAWING NO. D4168 TITLE 350 SKIDTUBE ASSEMBLY SCALE NTS REV. B SHEET 2 OF 11 COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	
--	--	---	--



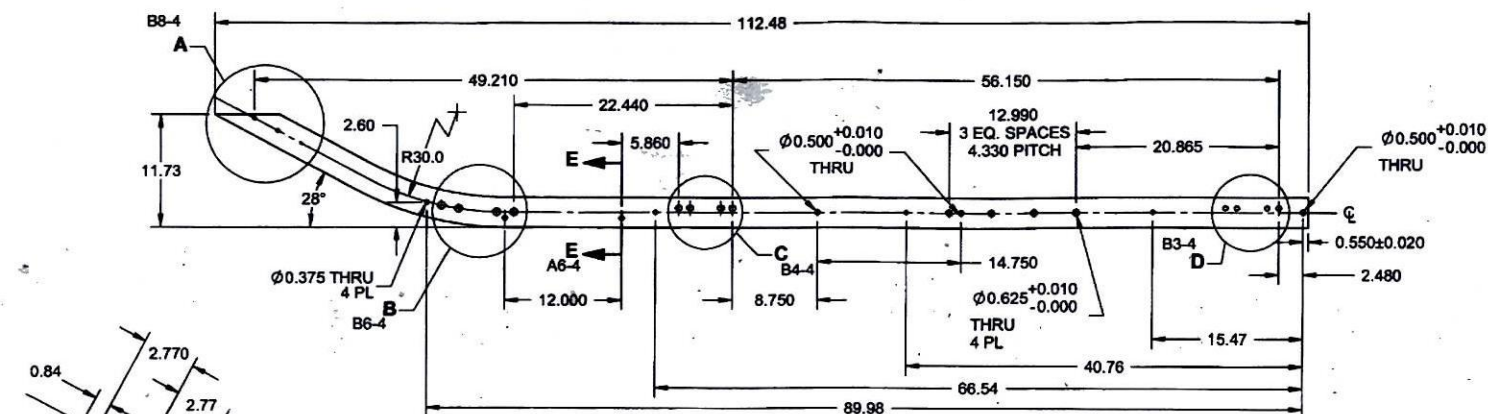
D4168-043 350 SKIDTUBE ASSEMBLY, LH



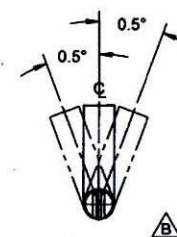
D4168-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
2013-08-13
MHD

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	KENT, WA	
CHECKED	SC	DRAWING NO.	REV. B
MFG. APPR.	SC	D4168	SHEET 3 OF 11
APPROVED	SC	TITLE	SCALE
DE APPR.	SC	350 SKIDTUBE ASSEMBLY	NTS
DATE	13.07.11	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

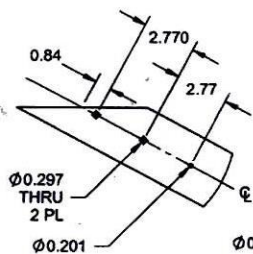


D4168-1 LH SKIDTUBE

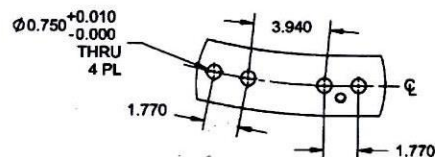


MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)

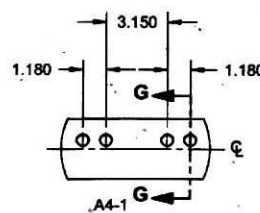
OUTBD



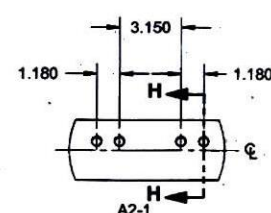
DETAIL A
SCALE 2X



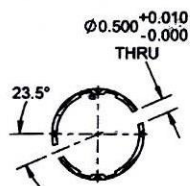
DETAIL B
SCALE 2X



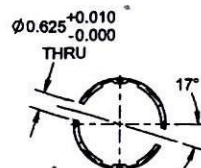
DETAIL C
SCALE 2X



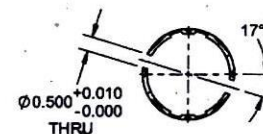
DETAIL D
SCALE 2X



SECTION E-E
SCALE 3X, 2 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

RELEASED
2013-08-13

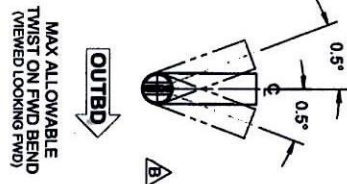
DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE 13.07.11

DART AEROSPACE USA, INC.
KENT, WA

DRAWING NO.
D4168
TITLE
350 SKIDTUBE ASSEMBLY

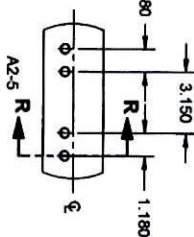
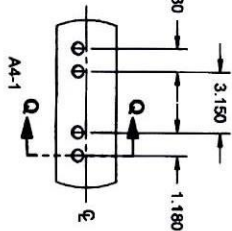
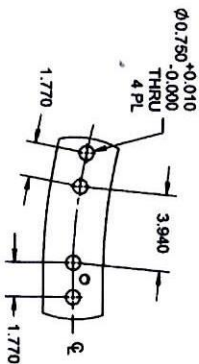
REV. A
SHEET 4 OF 11
SCALE
NTS

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



DETAIL J
SCALE 2X

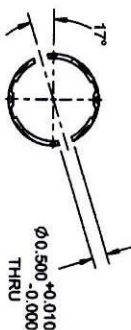
D8-5



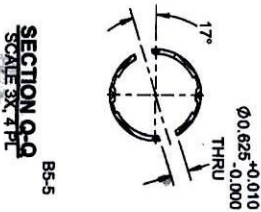
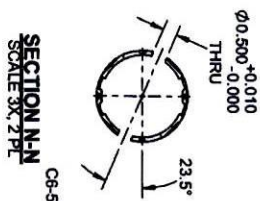
C7-5
DETAIL K
SCALE 2X



C3-5
DETAIL M
SCALE 2X



RELEASED
2013-08-13



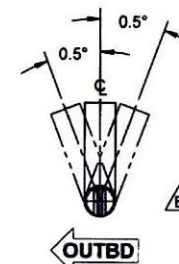
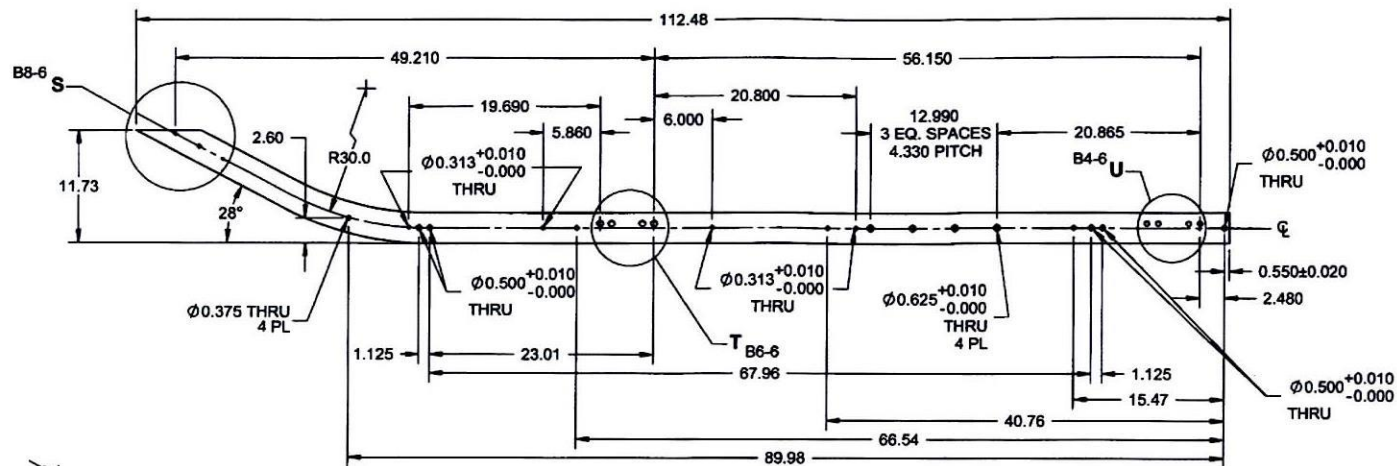
C6-5
~~SECTION N-N~~
~~SCALE 3X, 2 PL~~

B5-5
SECTION Q-Q
SCALE 3X, 4 PL

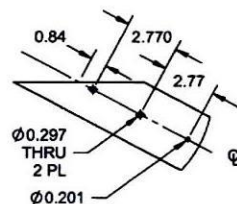
B3-5
SECTION R-R
SCALE 3X, 4 PL

DESIGN	SP	DART AEROSPACE USA, INC.
DRAWN		KENT, WA
CHECKED		
MFG. APPR.		DRAWING NO.
APPROVED		DA168
DATE	13.07.11	TITLE
		350 SKIDTUBE ASSEMBLY
		REV. B
		SHEET 5 OF 11
		SCALE
		NTS

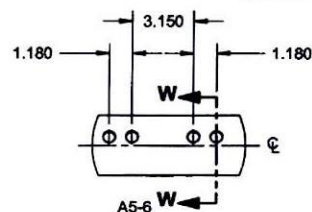
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE USA, INC.
 IT IS TO BE USED FOR THE PURPOSES SPECIFIED IN THE ORDER.
 IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE USA, INC.



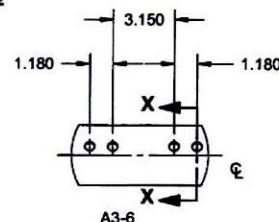
MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)



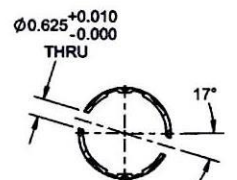
DETAIL S
SCALE 2X



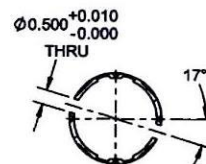
DETAIL T
SCALE 2X



DETAIL U
SCALE 2X



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

RELEASED
2013-08-13
JNP

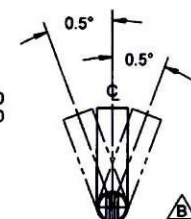
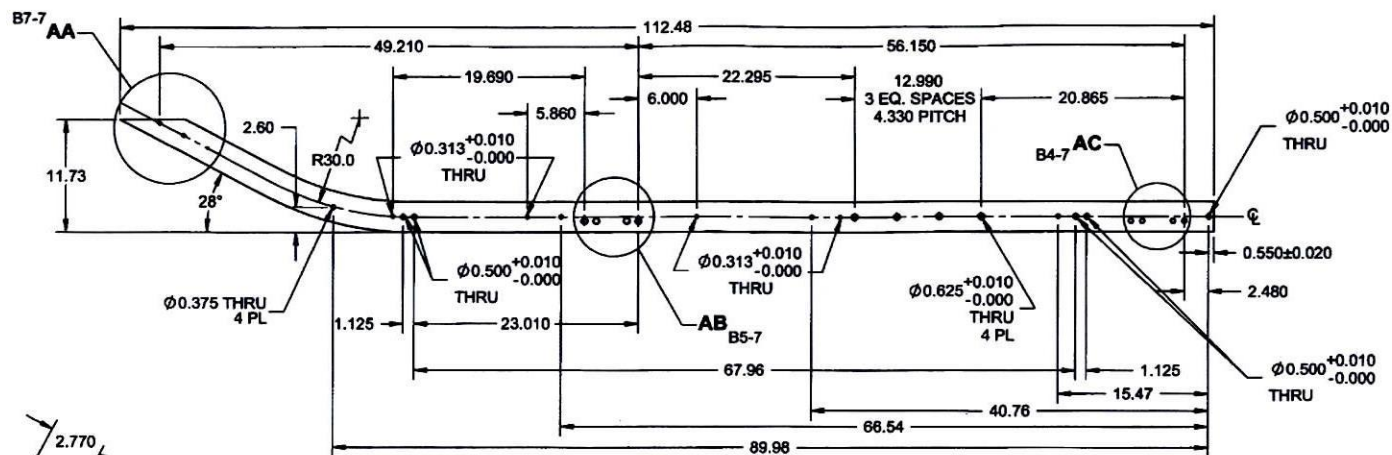
DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE 13.07.11

DART AEROSPACE USA, INC.
KENT, WA

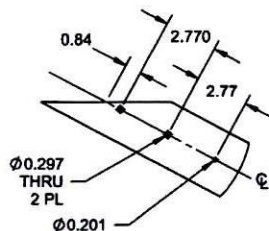
DRAWING NO. D4168
TITLE 350 SKIDTUBE ASSEMBLY
REV. B
SHEET 6 OF 11
SCALE NTS

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COPIES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

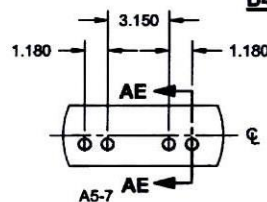
8 7 6 5 4 3 2 1



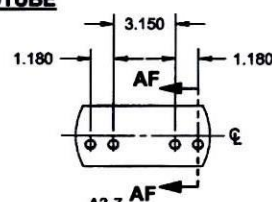
MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)



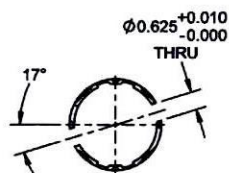
DETAIL AA
SCALE 2X



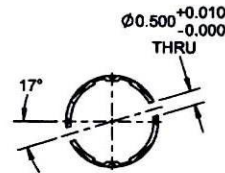
DETAIL AB
SCALE 2X



DETAIL AC
SCALE 2X



SECTION AE-AE
SCALE 3X, 4 PL

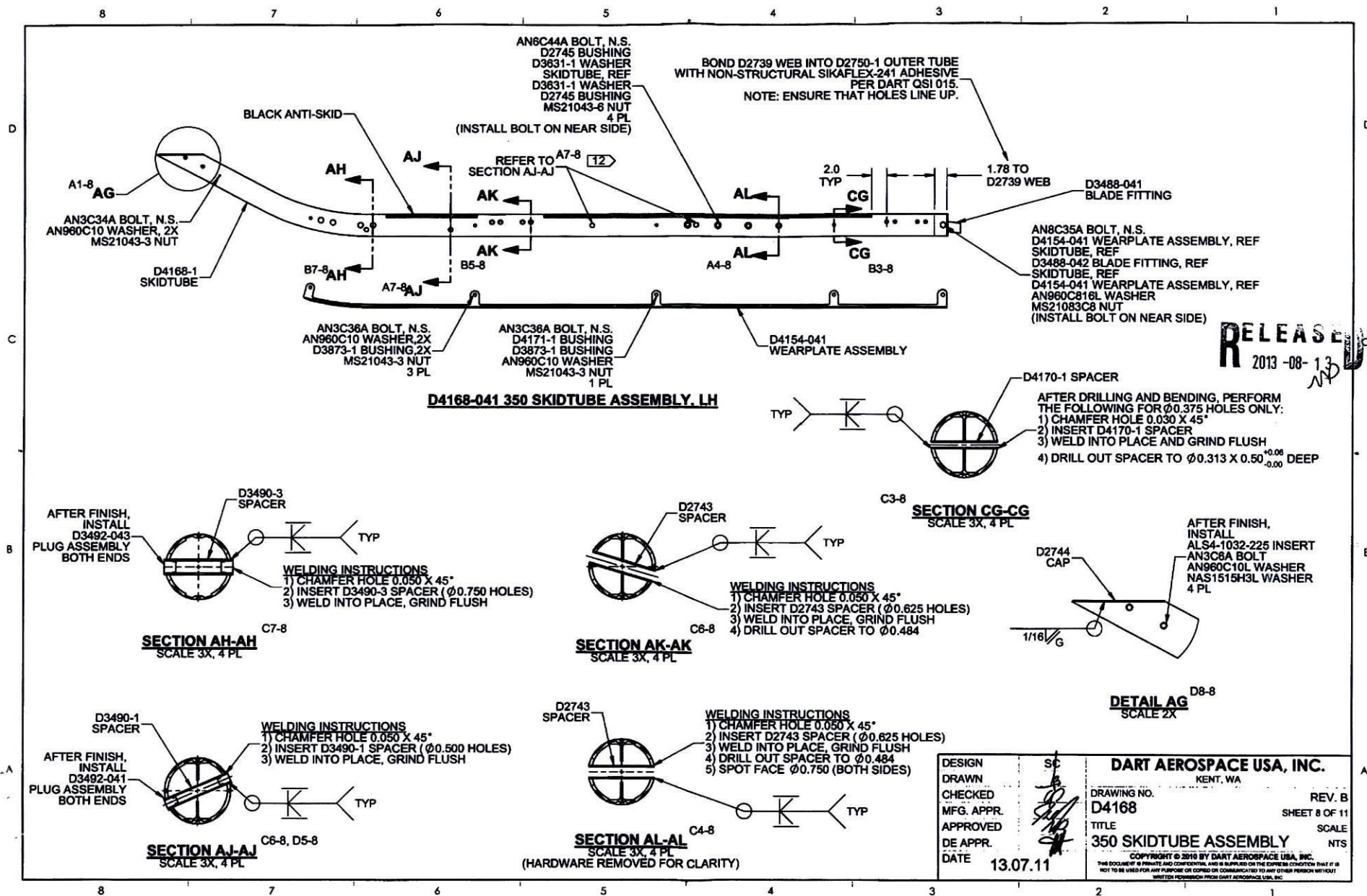


SECTION AF-AF
SCALE 3X, 4 PL

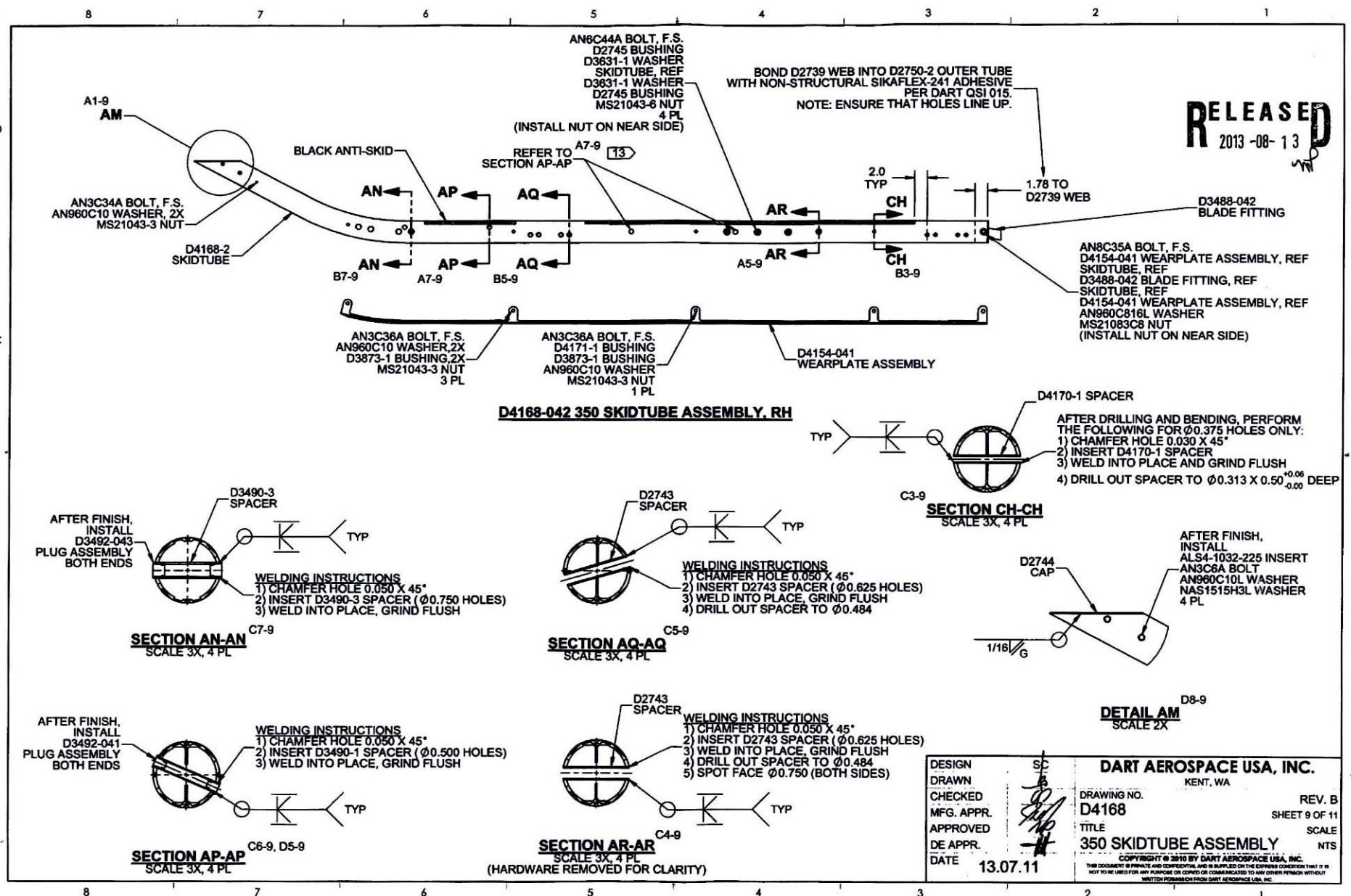
RELEASED
2013-08-13

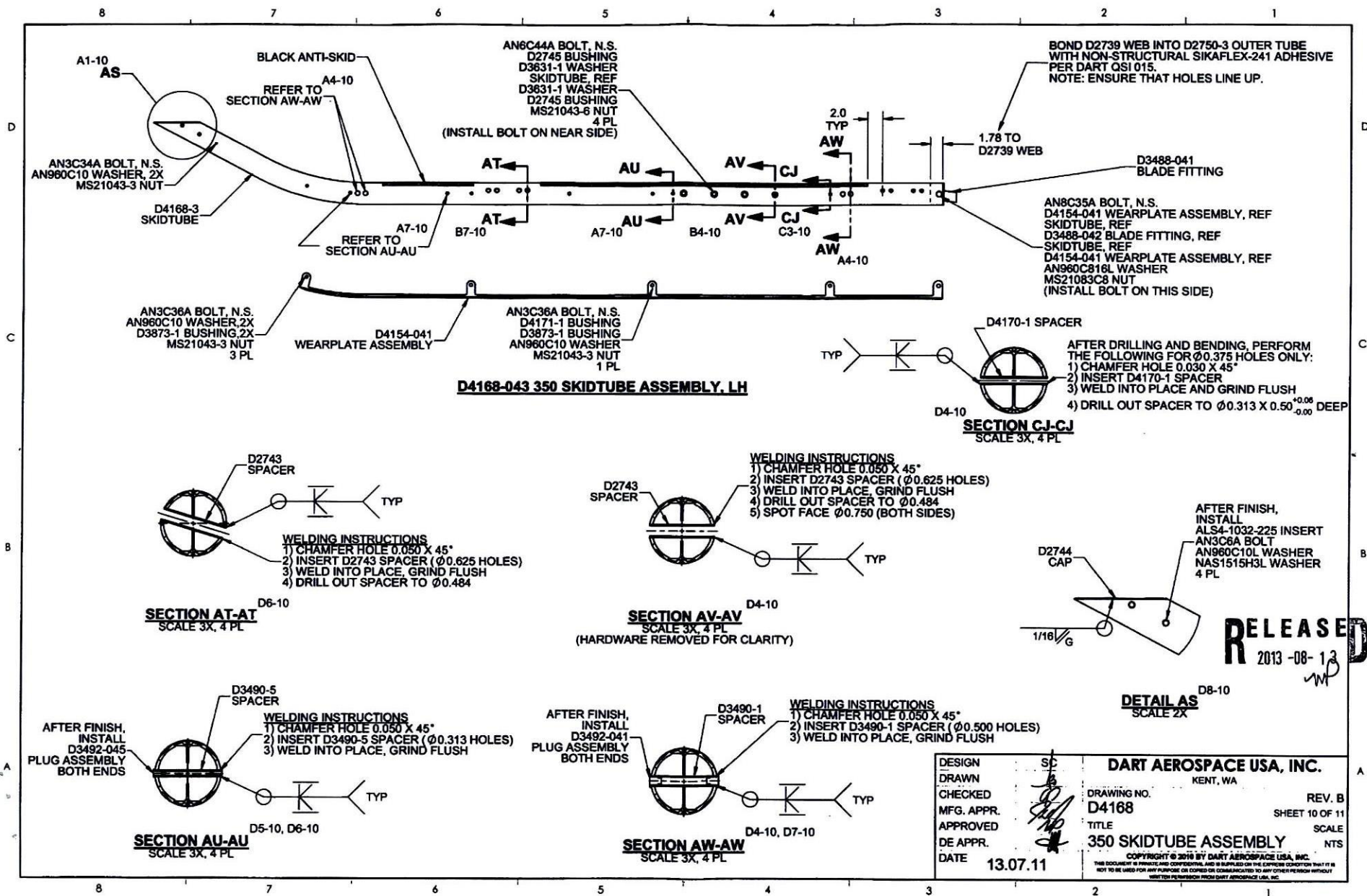
DESIGN DRAWN CHECKED MFG. APPR. APPROVED DE APPR. DATE	SC B H H H H 13.07.11	DART AEROSPACE USA, INC. KENT, WA DRAWING NO. D4168 TITLE 350 SKIDTUBE ASSEMBLY REV. B SHEET 7 OF 11 SCALE NTS COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.
--	---	--

8 7 6 5 4 3 2 1



RELEASED
2013-08-13



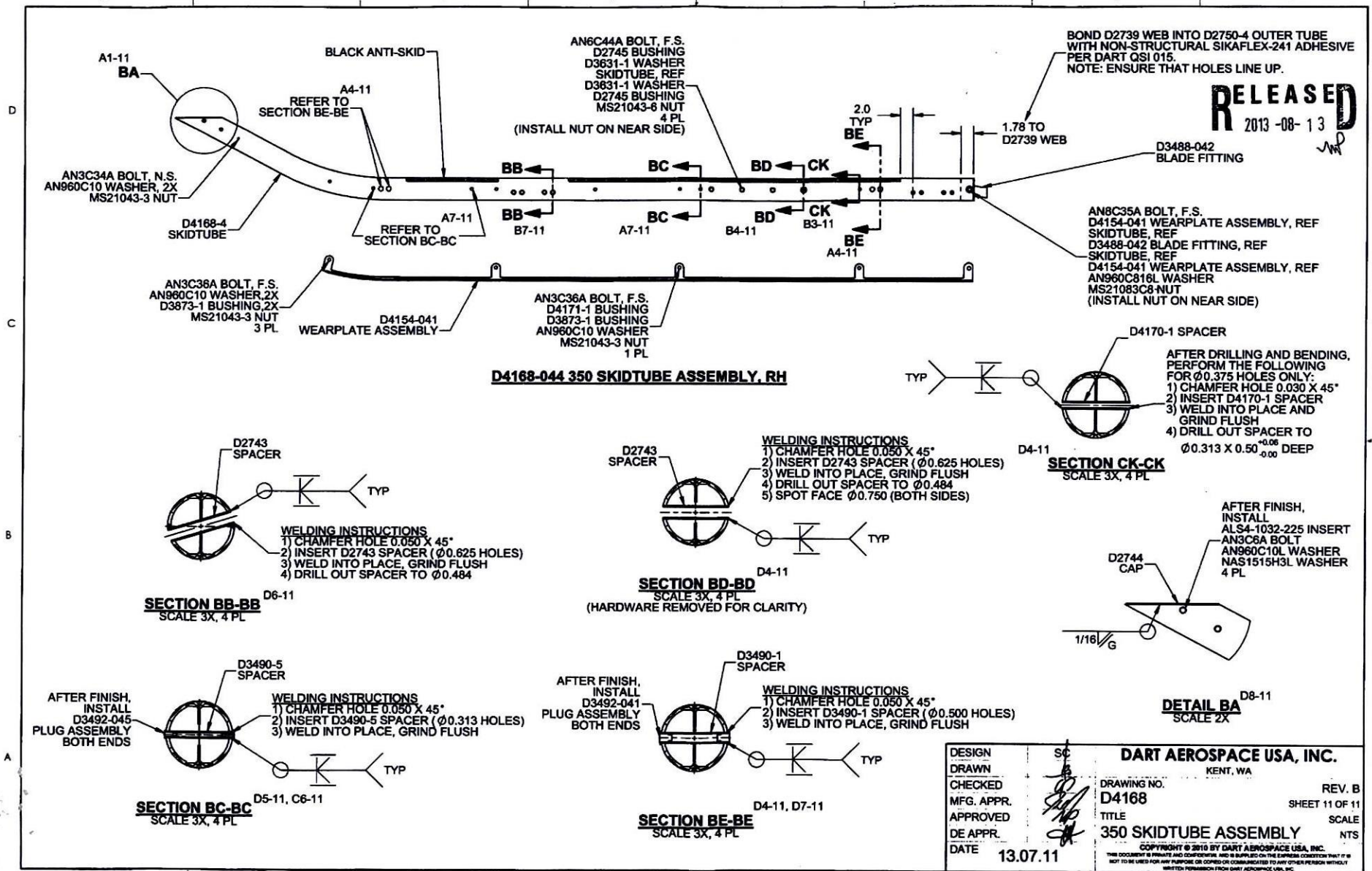


RELEASED
2013-08-13

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	SC	KENT, WA	
CHECKED	SC		
MFG. APPR.	SC		
APPROVED	SC		
DE APPR.	SC		
DATE	13.07.11		
		DRAWING NO.	REV. B
		D4168	SHEET 10 OF 11
		TITLE	SCALE
		350 SKIDTUBE ASSEMBLY	NTS

COPYRIGHT © 2010 BY DART AEROSPACE USA, INC.
THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

8 7 6 5 4 3 2 1



RELEASED
2013-08-13

Change Record

PAGE 1 OF 1

Part Number: D350-636-015/-016

Description: SKIDTUBE STD LH/RH w/ TRAINING WEARPLATE

[illegible]